**February Meeting****Friday, February 17
7:30 pm**

**Our Savior's Lutheran Church
1035 Carol Lane
Lafayette, CA****Presidential QRM****By Marty Heyman, W6MDH**

Thanks to all who came to the General Meeting on January 20th. It was an excellent turn-out which was fitting for a terrific speaker. I am sure we'll all be talking about those experiences in the aftermath of Katrina for some time. Again, the club thanks Chris Suter for coming by to share the story. It felt good to see the door prize go to a new member who already seemed enthusiastic about the hobby.

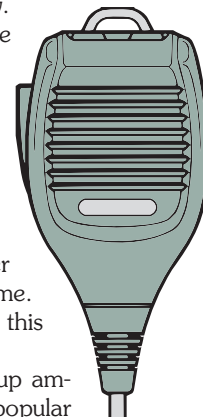
I'm new here and thanks to Jerry Gardner for reminding me, a little late, to write this note and for the excellent job month after month.

On a frustrating note, the power amplifier on our 2m repeater that was down for so long went down again late last week (February 2nd). Director and Technical Committee Member and Captain of the Mount Diablo Hill Climb Driving team, Trevor Raty, KG6MDW, quickly went up, pulled the amplifier, got the repeater back to 5 watts, and diagnosed the problem. The manufacturer was promptly notified and has promised rapid turn-around but that still means weeks. The amp is under warranty and we have no recourse but to have them repair it at this time. Many of our members and loyal friends need that higher power level so this was a big disappointment.

The Technical Committee recommended to the Board that a back-up amplifier be purchased so that this inconvenience on one of our most popular channels be minimized. The Board approved the purchase and hopefully the amplifier will be installed and we will be back to full power within a week of the second failure. I'm sure we'll all be glad to get back to normal. We're all thinking about what other steps we might take to avoid such problems on our other busy, high-quality repeaters.

Our Board of Directors meeting was held on Monday the 6th. Several department chairmen and consistent guests were present. It feels like we're off to another great year. Just a reminder to all, these meetings are open and members are welcome. It's a different view of what's going on behind the scenes and a great time to ask questions before, during, or after, of the officers and Directors (not that you can't at the General Meeting, too). Our next Board meeting will be held March 6th at the Carl's Junior at Citrus Plaza in Walnut Creek behind the Bank of America.

Other upcoming events include the General Meeting on the 17th at Our Savior's Lutheran Church in Lafayette and the March Technical Committee Meeting on the 4th of March at the Environmental Center in Pittsburg. Hope to see many of you come out.

**Inside**

General Meeting Minutes	2
Board Meeting Minutes	2
Being Part of a Ham Radio Team	3
RACES Training Schedule.....	4

SuitSat-1 Keeps on Ticking

NEWINGTON, CT, Feb 13, 2006—"SuitSat-1" remains operational more than a week after being deployed from the International Space Station, but its 145.990 MHz FM signal continues to be extremely weak copy on Earth. Speculation now is focusing on extremely low transmitter output power as one explanation for the faint signal. SuitSat-1's sponsor—the Amateur Radio on the International Space Station (ARISS) program—continues to seek voice telemetry reports as part of an effort to pin down what might have gone awry.

"The battery life is a big question mark," explains ARISS Ham Radio Project Engineer Kenneth Ransom, N5VHO. "We still do not know if the radio is pulling the normal power and losing it before the antenna or not pulling as much due to lower output. If the latter is true, the batteries will last much longer. That is one reason the battery telemetry is so important. It will help us plot the power consumption."

Ransom notes that the voice telemetry transmission order is: DTMF tone, CW ID,

Continued on page 4



Mt. Diablo Amateur Radio Club W6CX

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The *Carrier* is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and space is available.

All material must be submitted to the editor by the first day of the month of publication. Material is accepted on a first-in, first-out basis. Articles and other material may be submitted via Internet email to carrier@gardnerclan.net or delivered to the editor at the address listed in the club roster. Material will be accepted in plain ASCII or rich text format (RTF). Material may also be submitted as hardcopy.

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General Meeting Minutes

January 20, 2006

President Marty Heyman, W6MDH, **called** the meeting to order at 7:40 p.m. There were about 65 members and guests present.

There were no minutes of the previous meeting since it was the year-end party.

Treasurer Dick Schulze, AA6DL, **reported** that the treasury contained a total of \$51,223.02 in all accounts (Dick noted that included two certificates of deposit and receipt of about \$8700 from PACIFICON).

Dick presented the 2006 budget to the members for approval (previously approved by the Board). The members **approved** the budget as presented.

President Marty called for committee reports:

- Technical Committee: Trevor Hall, WA6JAU, **reported** the the amplifier was back on the hill, the voter project is underway for the Vaca and Oakland hills sites with a target date of Field Day on Mt. Diablo.
- EC: Dana Jones, K6BRR, **announced** that RACES training would be in the morning, Sat. Jan. 21, from 8 to 12 noon, at 1980 Muir Rd., in Martinez.
- Events Chmn: Pete Harris, KE6ZIW, **related** that there were no events scheduled as yet for this year.
- Chmn. John Schulze **reported** that the PACIFICON Committee was ready to go, also that the Club auction was coming up, and that the Club weekly net needed more control operators.
- VE Chmn: Jay Caldis, KT6Y, **announced** three exams given, all passed. These were: Jeremiah, KF4UAR, to General, Todd Meeter, a new Tech +, and Steve KG6WWH to Extra.

Marty **recognized** a new member, CJ Boyer, KI6BQT, and visitor Chuck Graham, PR director of the Salvation Army, Concord.

Marty **declared** a recess before the main speaker.

At 8:15 Marty reconvened the meeting and introduced Chris Suter, Deputy Chief of the San Ramon Fire Protection District. Chris' power point presentation of his team's mission to Jackson County, Mississippi (68mi. E. of New Orleans, with four main cities) after hurricane Katrina, was a forceful reminder of the necessity for preparedness, and, on the part of hams, to be ready to assist. One interesting note was the use of the National Guard Civil Support Team Communication Van.

After Q & A, Marty **adjourned** the meeting at 8: 45 p.m., for the drawing. The FT7800A was won by Tom KI6BXL.

Respectfully submitted,

Paul Dickey, N6JOX, Secretary

Board Meeting Minutes

February 6, 2006

President Marty Heyman, W6MDH, called the meeting to order at 7:00 p.m. Other Board Members present: Vice-President Sheldon Lawrence, KI6ATA, Secretary Paul Dickey, N6JOX, Treasurer Dick Schulze, AA6DL, Emergency Coordinator Dana Jones, K6BRR, Directors Jay Caldis, KT6Y, Bob Green, K6GD, and Trevor Raty, KG6MDW. Other club members: Past Pres. Trevor Hall, WA6JAU, Membership Chairman Pete Slagle, K6XL (7:15), and Dave Gordon, N6SWE.

The minutes of the Jan. 2 meeting were APPROVED, as sent by e-mail and printed in the *Carrier*. Treasurer Dick Schulze reported a balance of \$52,171.93, total of accounts, including three CDs, without including accrued interest not reported. He reported receiving a total of 188 membership renewals to date.

Old Business

- Marty advised the Board that the repeater coordination documentation was in order and sent to NARCC, expecting that the repeater would be recognized as fully coordinated, at full power. The power supply problem has reduced power temporarily to 5w.
- Marty reported that the church had advised that the December meeting date was not available, so the date of Dec. 8 was reserved as the alter-

nate. Trevor Hall will check the date with the caterer.

- Bob Green confirmed with the Board his understanding of the picnic arrangements so far: a Sept. date, expenses limited to \$450, and an open question of a charge. Bob will assess the situation and report back to the Board on his conclusions.
- Dick S. will check on the liability insurance carried by the Club, as to the number of members paid for (premium per member), and the extent of the coverage.
- Marty will check with World Radio to assure our VE dates/place will be in their listing.
- Pete confirmed with the Board that Feb. 20 would be the cut-off date for membership renewals to be included in the Directory. This year, a list of officers and directors will be in the Directory, which will be sent to all members via e-mail pdf, and there will be hard copies available at the general meeting for members that need those.
- Dana advised that he received a request from John, KM6QX, that the RACES group had suggested that the 440 repeater be coordinated with County OES as well as RACES. (In emergencies, the 2m repeater is used by the Hospital Net and Salvation Army, the 220 is reserved for digital, and 440 for RACES administrative.) While the Board had no particular objection, the question was left open for further discussion after Dana has obtained further information about the RACES/OES use of the .735 repeater.
- Trevor H. updated the Board on Technical Committee matters:
 - The 2m amplifier failed again. It was sent back to Henry under warranty, with the promise of repair to our satisfaction or replacement.
 - the question of a backup amplifier was discussed. The Board APPROVED the purchase of a backup amplifier from TE Systems for approximately \$592.
 - The Tech Committee will bring to the Board an estimate for other backup equipment needed in the foreseeable future.
 - The voter project was updated by Trevor Raty. He provided a quote of \$1338.87 for equipment to get the system functioning on both Vaca and the Oakland Hills. The estimate includes placement of the voters in secure sites at both places. The Board APPROVED the expenditure, and will bring the cost to the general meeting for approval.

New Business

- The question of the ongoing loan of Barry's power supply to the Club (for the repeater) was discussed. The Board APPROVED purchase of it, for the same amount as a new Astron RS-50 (+/- \$300). Marty will contact Barry to work out the details.

President Marty adjourned the meeting at 8:30 p.m.

Respectfully submitted, Paul Dickey, N6JOX, Secretary



The Thrill of Being Part of a Ham Radio Team

By Pete Harris, KE6ZIW

It's that exciting time of year when many ham radio operators from the Mt. Diablo Amateur Radio Club become involved in doing radio team communications for various Public Service events that occur nearby.

The events include long distance bike rides, bike races, horse trail rides, running races, walkathons, Alcatraz swims, a half marathon, a triathlon, Police Olympics, and the Pleasant Hill 4th of July parade.

The locations include beautiful scenic areas such as nearby Regional Parks and Wilderness Areas, Mt. Diablo State Park, municipal trails and parks, the spectacular canyon roads surrounding Sunol, and the stunning San Francisco Waterfront and Bay. Some of the agencies and causes that we help are: Children's Hospital of Oakland, the MS Society, the March of Dimes, the American Lung Association, and Save Mt. Diablo.

Radio operators are assigned to check points, or to SAG wagon vehicles, or are on bikes, or sometimes in boats. Radio communications in some of these areas can be a challenge, but very gratifying and a whole lot of fun! When you participate, consider bringing a family member or friend to show them the excitement of the ham radio hobby.

Participating in these events is a thrilling experience for many different reasons. Some of the reasons are:

- The magic of radio transmissions,
- The camaraderie of being part of a radio team that helps to ensure safety for hundreds, sometimes thousands, of event participants,
- The chance to do something meaningful for a good cause,
- The fun and satisfaction of using your radio equipment and opportunity to learn its various capabilities in real-life situations,
- The beautiful places and settings that you get to enjoy

For most events all you need is a hand-held 2 meter ham radio and an extra battery. A portable magnetic-mount antenna can come in handy. Some events allow off-road 4-wheel drive experiences.

See the list of upcoming events at the end of this article. Give me a call or email to sign up (Pete Harris at 925-228-4503, pharris125@comcast.net). You can also sign up for events at our regular MDARC monthly meetings.

The events listed below are coming up this year and have slots available.

1. MS Walk
4/8/06, Heather Farms Park, Walnut Creek
Radio Coordinator: Jeff Hart
2. Primavera 100 Mile Bike Ride
4/23/06, Sunol
Radio Coordinator: Bob Green
3. Top Hat Classic Bike Ride
4/22/06, Pleasanton
Radio Coordinator: Dick Brown,
4. March of Dimes WalkAmerica
4/29/06, Heather Farms Park, Walnut Creek
Event Coordinator: Terry Matzkin,
5. Escape From Alcatraz Swim and Triathlon
6/4/06, San Francisco Waterfront & Bay

RACES Training Schedule February - April 2006

Date	Location	Subject
February 18, 0800-1200	50 Douglas Drive, Martinez, CA	Ready Kit, Message Handling, Emergency Nets, Class & Field Exercise
March 18, 0800-1200	Con Fire Training Center, Pleasant Hill	Check-in & Staging Classroom
April 15, 0800-1200	Con Fire Training Center, Pleasant Hill	Check-in & Staging Field Exercise

Be sure to verify the time and place of training on the countywide RACES net on the Thursday evening prior to the event. The countywide net airs at 7:20 PM on 147.735 Central County, 145.410 South County and 145.490 West County.

Radio Coordinator: Barry Bettman

6. 4th of July Parade
7/4/06, Downtown Pleasant Hill
Radio Coordinator: Pete Harris
7. Alcatraz Challenge Swim
7/16/06, San Francisco Waterfront & Bay
Radio Coordinator: Barry Bettman
8. Concord Mt. Diablo Trail Ride
date not announced yet, Mt.. Diablo, 4WD vehicles welcome
Radio Coordinator: Tom Seabury,
9. Devil Mountain Run
date not announced yet, Danville
Radio Coordinator: Ed Ritchie,
10. Mt. Diablo Challenge Bike Race
date not announced yet, race up Mt.. Diablo
Radio Coordinator: John Stuart
11. Mt. Diablo "Get Dirty" Trail Adventure
date not announced yet
Radio Coordinator: John Stuart
12. Human Race Walkathon
date not announced yet, Heather Farms Park, Walnut Creek
Radio Coordinator: Lauren Styles

SuitSat-1 Keeps on Ticking

Continued from page 1

SSTV image, 30 seconds of silence, voice identification, mission time, temperature and battery voltage. The voice messages, telemetry and SSTV image are being sent on a nine-minute repeating cycle. Post telemetry reports or recordings to SuitSat@comcast.net. Late reports showed the battery voltage holding at 26.7 out of a nominal 28 V. The transmitter, albeit likely at much-reduced output, and the controller appear to be functioning.

"The SuitSat team plans to provide special recognition to the person who copies the last SuitSat telemetry, specifically the mission time and battery voltage," ARISS International Chairman Frank Bauer, KA3HDO, said over the weekend.

AMSAT-NA reports that using its RF Link Budget spreadsheet along with data from well-equipped amateur satellite stations plus "a few assumptions to fill in the gaps," calculations

indicate that SuitSat-1's transmitter power likely is in the range of 1-10 mW. The onboard transmitter was supposed to put out 500 mW and produce a signal that could be copied on Earth using modest receiving gear and antennas. Subjected to that load, the batteries were not expected to hold out much past February 12.

Its puny signal aside, the novel SuitSat-1 Amateur Radio transmit-only spacesuit turned satellite has been heard around the globe since its February 3 launch. Those hoping to hear it using a handheld transceiver or scanner have been disappointed, however. From the outset, SuitSat-1's signal was by and large reported as very weak. Those hoping to get clean copy of SuitSat-1's signal should possess excellent VHF receiving equipment and high-gain antennas.



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CALENDAR OF EVENTS

February 6	7:00 pm	MDARC Board Meeting	Carl's Jr. 2280 Oakgrove, Walnut Creek
February 17	7:30 pm	MDARC General Meeting	Our Savior's Lutheran Church
February 28		March <i>Carrier</i> Deadline	
March 6	7:00 pm	MDARC Board Meeting	Carl's Jr. 2280 Oakgrove, Walnut Creek
Thursday Evenings	7:30 pm	MDARC Club Net	147.06 & 441.325 MHz

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